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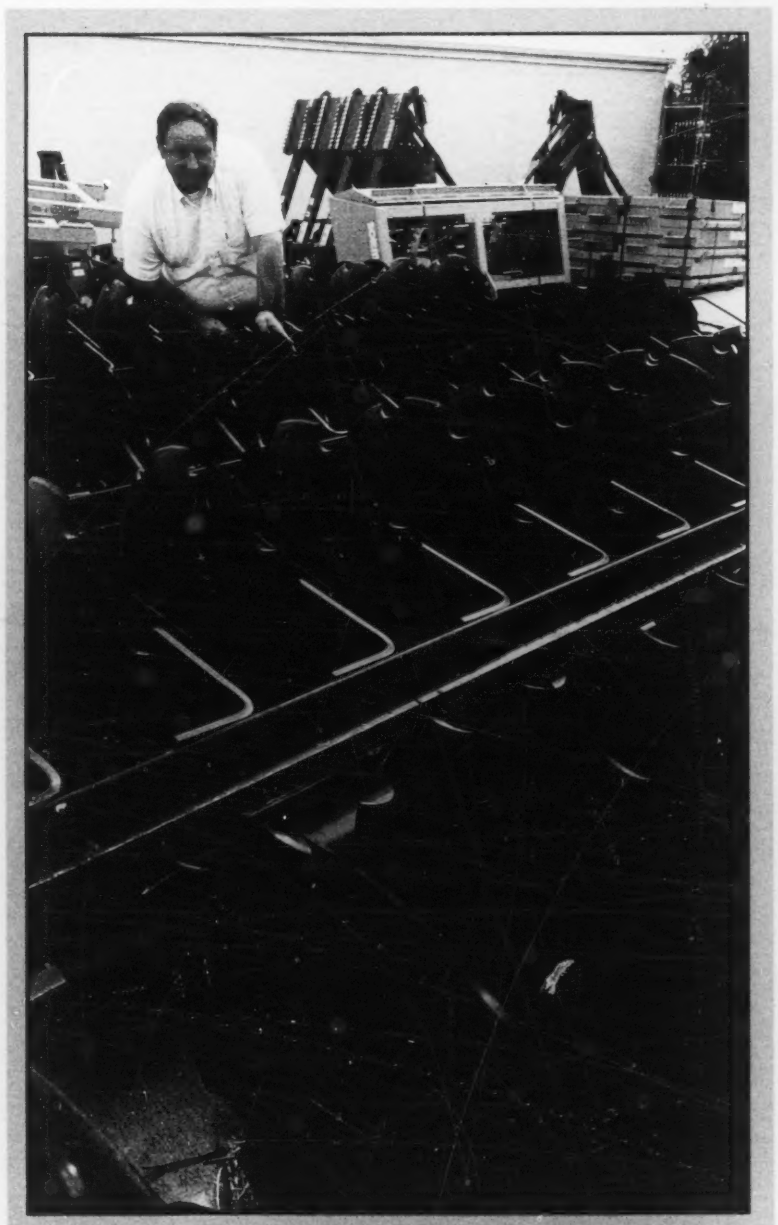
LEASING EXPANDS OPTIONS PAGE 7

IMPLEMENT & TRACTOR

The Business Magazine of the Agricultural, Industrial & Outdoor Power Equipment Industry

VOLUME 106, No. 1 JANUARY 1991



SALES MANAGER Darryl Fountain keeps close watch on Solex operations in several western states, including Hawaii. The Dixon, Calif., company has built a successful business importing specialty implements. Story on page 12.

For Small Utility Engines

California Air Law Sets Precedent

By HARRY CLINE

CALIFORNIA has adopted the nation's first emission control standards for small utility engines, the type used in mowers, leaf and grass blowers, string trimmers and other lawn and garden power tools.

"All pollution sources, both big and small, must do their share if we are ever able to offer all Californians air that is healthy to breathe," says James D. Boyd, California Air Resources Board (CARB) executive officer. "We've been regulating some major pollution sources, such as motor vehicles and oil facilities for more than 20 years and these small utility engines have much higher emissions for their size, simply because they have been unregulated up to this point."

Many of these small engines, according to CARB, emit up to 50 times more pollution per horsepower than a typical truck engine. A lawn mower running for 30 minutes will match a car's hydrocarbon output over 172 miles. Combined, the pollution from all small engines operating in the state equal the hydrocarbons from 3.5 million 1991 model

(See EMISSIONS, pg. 3)

All Dealers Face Threat Of Lawsuit

By SCOTT NESBITT

IT WOULDN'T happen here. Folks aren't like that."

You may note that thought going through your head while watching "L.A. Law" and those make-believe people going after each other's throats in court.

Like a lot of other people blessed with the chance to live outside the violent atmosphere of the big cities, you may place greater reliance in the goodwill of your neighbors and customers.

Don't bet on it.

Chances are you've already risked every penny you're ever earned in business, and maybe every penny you'll earn for the rest of your life.

Has your parts department ever sent a customer out the door with a part that "will probably work?"

EDITOR'S NOTEBOOK

It hardly matters what the part is. It could be a drive sheave or a V-belt, or maybe a roller bearing, U-joint or brake pad. It could be something as seemingly minor as

(See LAWSUIT, pg. 2)

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Inside

DEPARTMENTS

For Your Information	5
Industry News	8
Product News	14,15,19
Marketplace	20
Who's Who	23

FEATURES

Supplier's Shadow	4
Leasing	7
Pesticide Application	10
Import Business	12
Innovative Plow	17
Alternative Fuels	18

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EMISSIONS—

(From pg. 1)

cars, each driven 16,000 miles per year.

"We are simply asking these (small engine) manufacturers to take the first step in controlling their pollution just like car manufacturers and others did years ago," Boyd says.

The 2 standards set recently by CARB will cut emissions of smog-forming hydrocarbons and nitrogen oxides by 46 percent by 1994, the first year of a 2-phase program, and by 55 percent by 1999, according to CARB, which estimates the standards will reduce emissions by about 433 tons per day statewide by 2010. Engines produced after Dec. 31, 1993 must be certified as meeting 1994 CARB standards and Dec. 31, 1998 is the deadline for meeting 1999 emission levels.

Just like car manufacturers found when California jumped the gun on the rest of the nation and established pollution emission levels for automobiles before the federal government did, it will cost the small-engine manufacturers more to modify or redesign engines to meet those standards. And, just like Detroit, those costs will be passed on to those who own and operate small engine-powered lawn and garden power tools.

CARB estimates the additional pollution control measures will run the cost up an average of $30 per unit. John Liskey, director of technical and statistical services for the Outdoor Power Equipment Institute says it may not be quite that high, but it most certainly will average $15 to $20 more per unit sold.

"The $30 was based on the initially proposed and more stringent pollution control guidelines announced by CARB," says Liskey. OPEI managed to get CARB to modify those first set of regulations, which Liskey said would have virtually banned all 2-cycle engines by 1994 and many small 4-stroke engines.

Most manufacturers, he says, can provide products to lawn care professionals and homeowners within the 1994 emission standards. "They may not have all products in existence that they now have, but most engines can be modified to meet the first set of standards. The majority of the manufacturers believe they can do business under the '94 guidelines without too much impact.

"The 1999 standards, however, are a big unknown. If you ask most manufacturers today whether they can meet them, the answers would be 'no'. But, what will happen in the next 5, 6 or 7 years—is a big unknown. However, it is obvious that to meet those requirements will mean radically changing products or creating new add-on technology like catalytic converters," Liskey said.

"It will be easier for manufacturers of premium, higher priced products to absorb that added cost, people like John Deere, Toro and Honda. While adding $30 to the cost of a $450 mower is significant and will have an impact, it will not have the same impact as it would for mass merchandisers who are faced with adding $30 to the cost of $129 mowers."

At this point, the new rules are all inclusive to everyone who buys new lawn and garden power tools in California. And, they soon may cross California's borders into other states.

"California can be viewed 'coming attractions' for the rest of the country," according to Dennis Cox, president of OPEI. That's especially true since there are no federal pollution standards for small utility engines.

The Environmental Protection Agency is just now beginning its study on these small engines, which were included in the federal clean air act through amendments signed into law last November.

"We are just getting under way on a study looking at the contribution these small engines make to air quality problems," says Paula Van Lare, environmental engineer with the EPA's division of mobile sources in Ann Arbor, Mich. "We are supposed to have it finished by Nov. 15, 1991."

Other states are apparently considering following California's lead and not wait for EPA."We have heard rumors that Oregon and New York were considering adopting California's regulations, but as far as we know, nothing firm has come down," says Liskey. "However, I do believe the majority of the states will wait for the EPA standards because most of them do not have pollution problems as serious as California's."

California's right to even set standards has been challenged by the Equipment Manufacturers Institute (EMI) which says passage of the 1990 federal Clean Air Act Amendments preempts CARB from regulating farm and construction equipment under 175 horsepower.

EMI took a lead role on the side of large machinery in dealing with both California and the federal government. In early December, it established a liaison with the Ann Arbor, Mich., office of the EPA, which will handle coordination of the new standards.

Emmet Barker, EMI president, who led lobbying and legislative effort for the Clean Air Act, called the provisions establishing a single federal standard a "major victory" for the equipment industry.

But CARB rejected the argument of federal law preempting state regulations in setting the standards. "Our regulations, as we see them, do not concern farm and construction equipment, but utility engines used primarily in gardening," says CARB spokesman Jerry Martin. "We feel we are on very firm ground," indicating that it is up to EPA to challenge California's right to set emission standards for small engines.

Liskey said California's lead, regardless of whether it's valid or invalid, certainly sets the precedent for not only other states, but EPA as well, and that is why the institute lobbied hard during its 10 months of negotiations with CARB to not only set what it considered as realistic, achievable standards, but to look at

(See EMISSIONS, pg. 22)

Exhaust Emission Standards for 1994-1998 Utility Engines

Emissions Standards (grams/brake horsepower hour)

	Total Hydrocarbons + Nitrogen Oxides	Carbon Monoxide	Particulate-Diesels
All Engines (i.e. 4-stroke engines)			
Above 225 cc Displacement	12.0	300	0.9
Under 225 cc Displacement	10.0	300	0.9

	Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
Hand-Held Equip. Engines (i.e. 2-stroke engines)				
Above 50 cc Displacement	180	600	4.0	–
Under 50 cc Displacement	120	300	4.0	–
Under 20 cc Displacement	220	300	4.0	–

Exhaust Emission Standards for 1999 and Subsequent Utility Engines

Emissions Standards (grams/brake horsepower hour)

	THC + NOx	CO	PM-Diesels
Non Hand-Held Equip. Engines	3.2	100	0.25

	THC	CO	NOx	PM
Hand-Held Equip. Engines	50	130	4.0	0.25

INDUSTRY UPDATE

Sales: Nice November Numbers

With the exception of still-lagging sales of tractors under 40 horsepower, the U.S. machinery market showed improvement in November over 1989 results, and showed a rebound from the late-summer slump apparently triggered by Iraq's invasion of Kuwait, according to the Equipment Manufacturers Institute report.

Especially encouraging for the industry as the year finishes up was a 23.9 percent rise in 4wd tractor sales and a 15.5 percent rise in combine sales. Inventory figures for October showed stockpiles below the 12-month level that some analysts consider the "glut" level, but well above the 6-month supply that produces, in some analyses, higher prices for dealers.

U.S. - UNIT RETAIL SALES

	November			January-November			October 1990 Inventory
Equipment	1990	1989	% Change	1990	1989	% Change	N.A.Factory & U.S. Field
Farm Wheel Tractors:							
2-Wheel Drive							
Under 40 HP	2,212	2,475	(10.6)	39,827	44,522	(10.5)	41,497
40 & Under 100 HP	2,419	2,368	2.2	35,536	32,272	10.1	24,665
100 HP & Over	1,974	1,726	14.4	19,248	18,152	6.0	16,382
Total 2-Wheel Drive	6,605	6,569	.5	94,611	94,946	(.4)	82,544
Total 4-Wheel Drive	522	396	31.8	4,669	3,767	23.9	2,662
Total Farm Wheel Tractors	7,127	6,965	2.3	99,280	98,713	.6	85,206
Combines (Self-Propelled)	1,213	965	25.7	9,352	8,098	15.5	5,548

Shipments Of Key L&G Products Show Increase For 1990

Twelve month industry shipments of key lawn and garden products increased in the 1990 model year according to estimates by the Outdoor Power Equipment Institute (OPEI).

The key consumer lawn and garden products were: walk-behind power mowers, lawn tractors, riding mowers, garden tractors, and walk-behind tillers. The model year for these products is September 1, 1989 through August 31, 1990.

Total shipments for the key products were 7,288,000 units. By product category, Front Engine Lawn Tractors and Riding Garden Tractors showed a significant increase, 12% respectively.

Walk-behind mowers totaled 5,700,000 units, an increase of 8%. Rear Engine Riding Mowers showed a slight decrease to 247,000 units. Walk-behind tillers decreased approximately 2% to 300,000 units.

OUTDOOR POWER EQUIPMENT INSTITUTE
1990 INDUSTRY SHIPMENT ESTIMATES

	1990	1989	% Change
Walk-Behind Power Mowers	5,700,000	5,300,000	+8%
Lawn Tractors & Riding Mowers	1,132,000	1,053,000	+8%
Front Engine	885,000	793,000	+12%
Rear Engine	247,000	260,000	-5%
Riding Garden Tractors	156,000	139,000	+12%
All Riders	1,288,000	1,192,000	+8%
Rotary Tillers	300,000	305,000	-2%
TOTAL	**7,288,000**	**6,797,000**	**+7%**

Allied Reports 3rd Quarter Loss

Allied Products Corp., parent company of White-New Idea, Bush Hog and Lilliston, reported a net 3rd quarter 1990 loss of $3,441,000 on net sales of $115,295,000 through all units of the company, which has operations in transportation, industrial products and chemical specialties in addition to the farm equipment subsidiaries.

For the 1st 9 months of the year, Chicago-based Allied Products recorded net sales of over $406 million and a net income of almost $1.27 million, a drop from 1989 results from the same period of $452.6 million in net sales and $3.47 million in net income.

Richard A. Drexler, president and chief executive officer, said sales of the agricultural equipment group "softened somewhat during the (3rd) quarter, in line with a general industry trend." □

Canadian Sales Slump Continues

Weakness remained the watchword in the Canadian farm machinery market through November, according to figures released by the Canadian Farm & Industrial Equipment Institute.

Through the first 11 months of 1990, sales were down in all categories except for mower conditioners, which showed an 8.9 percent rise.

Canada Report
Retail Sales In Units

	November			November-YTD		
Equipment	1990	1989	% Chg.	1990	1989	% Chg.
Farm Wheel Tractors						
2WD under 40 H.P.	227	270	-15.9%	3,355	3,707	-9.5%
2WD 40-99 H.P.	492	541	-9.1%	6,368	6,971	-8.7%
2WD 100 H.P. & Over	154	142	8.5%	2,281	2,626	-13.1%
Total 2WD	873	953	-8.4%	12,004	13,304	-9.8%
Total 4WD	96	141	-31.9%	1,448	1,336	11.4%
Total Farm Wheel Tractors:	969	1,094	-11.4%	13,492	14,640	-7.8%
COMBINES						
Self Propelled	64	119	-46.2%	1,320	1,513	-12.8%
Pull Type	10	12	-16.7%	174	617	-71.8%
BALERS						
Rectangular Balers	57	53	7.5%	1,144	1,358	-15.8%
Round Balers	89	90	-1.1%	3,628	3,726	-2.6%
SWATHERS						
Self Propelled	31	29	6.9%	724	904	-19.9%
Pull Type	19	25	-24.0%	1,157	1,378	-16.0%
FORAGE HARVESTERS						
Shear Bar Type	16	41	-61.0%	513	514	-0.2%
MOWER CONDITIONERS	116	70	65.7%	3,276	3,008	8.9%

SIMA Exhibition In March

The next SIMA Exhibition will take place in March, 1991 in Paris, France.

This International Exhibition is a unique opportunity to promote and discover the newest technologies in agricultural machinery. More than 1,000 exhibitors from 25 countries will present their most innovative equipment.

As the 1990 SIMA Exhibition drew over 650,000 professional visitors, with 40,000 coming from 96 different countries, an increased and worldwide turn-out is expected in 1991.

This event will be divided into two specialized exhibitions:

SIMA—The SALON INTERNATIONAL DE LA MACHINE AGRICOLE (The International exhibition of Farm Machinery) will take place March 3-7, 1991, in all 6 halls of the Parc des Expositions at the Paris Nord-Villepinte. The Exhibition will take place on a surface area of over 1.7 million square feet with all types of agricultural machinery exhibited, such as tractors, tillers, soil preparation machines, seeders, irrigation materials, harvesters, as well as farm machinery parts, accessories, hydraulic equipment and electrical components.

SIMA—PRODUCTIONS ANIMALES (The International Exhibition of Livestock Production) will take place March 5-8, 1991, in Hall 7 of the Parc des Expositions at the Paris-Port de Versailles, just next to the 'General Contest' of animals. This Exhibition will be the most important event on breeding equipment in Europe with a surface area of over 800,000 square feet. This Exhibition will combine SIMA-VIP/SIMA ELEVAGE (The International Exhibition of Animal Breeding Equipment), SITEPAL (The Bulk Feed Processing Show) and LES EQUIPEMENTS LAITIERS ET DIVERS POUR L'ELEVAGE (The Dairy and Miscellaneous Equipment for Stock Breeding Exhibition). □

BRIEFLY...

Case International is funding a University of Arkansas study of variables affecting rice harvest loss and rice kernel quality.

A major goal is to develop a computer program that will analyze how factors such as moisture content and harvesting methods affect the crop and making the knowledge available to farmers and scientists.

Case is funding the project in cooperation with the Rice Foundation and the Arkansas Rice Research and Promotion Board. □

LAWSUIT

(From pg. 2)

John Deere dealers then made arrangements with customers to have their machines receive the product improvement program.

"The combine owner in the case of Burke vs. Deere was aware of Deere's product improvement program. Indeed, at the time of the accident, the combine owner had already made plans with his dealer to have the necessary work performed at the dealership."

Notice that a dealership was involved, and was apparently trying to do the right thing in this situation. Deere was also trying to do the right thing. The jury determined that Burke was 40 percent at fault, meaning he would receive only 60 percent of the actual damages.

Still, the injury decided that Deere was guilty of "willful and wanton disregard for the rights and safety of another," and make the award of $50 million in damages. A story in the Omaha World-Herald on Nov. 29, 1990, said the bulk of that money, if finally awarded, could end up in a special fund to aid others injured in combine accidents.

Might the money provide a "war chest" to help mount other court cases against other farm machinery companies?

The prospects are frightening, if uncertain at present.

What is certain is that there's no protection for a dealer who figures he needn't worry about being sued because small-town folks just don't do those things. Stanton, Iowa, and Supulpa, Okla., aren't Metropolis, and there's no Super Man in the form of a multi-billion-dollar manufacturer waiting to swoop in and save the good-hearted but ill-advised dealer who figures he can just let things slide. □

EMISSIONS

(From pg. 3)

different types of equipment that may be use widely outside of California.

"In our discussions with CARB, we made statements concerning the federal responsibility California had in setting its state standards," Liskey said. An example of that was *in the categories, one* for "all engines" and another for "handheld equipment engines." While most 2-cycle engine applications fall under the later category and 4 stroke under the former, there are exceptions, like lightweight, walk-behind snow blowers, not a big item in California but one that is very common in many other parts of the country.

Liskey says there are many 2-cycle lawn mowers sold today, but California regulators assumed that they could be easily replaced by 4-stroke units. But, that's not the case for many snow blowers which need to be light weight and maneuverable.

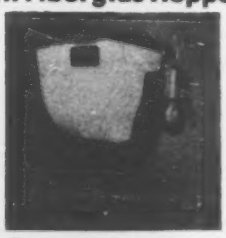
"We were able to carve out a deal to cover these hybrid 2-stroke applications that are important elsewhere in the country," Liskey says. "We knew that these 2-cycle applications could not meet the 'all engines' requirements which would essentially ban many snow blowers. It was important that we gain exemptions for them because of the impact California's regulations would have elsewhere."

While the 1999 standards have been issued, they are not necessarily in concrete, according to Liskey. "We fought hard to get CARB to move the final standards out to at least 2002 or 2003 because CARB had not really done any kind of in-depth study on the cost requirements of making some of the radical changes that will be necessary to meet the final standards," Liskey says. Unfortunately for the manufacturers, the 9-member CARB board stuck with its staff recommendations of 1999 at the target year for achieving the final emission standards.

However, OPEI did manage to get CARB to agree to progress review in 1994 and 1996. "If progress is not adequate, CARB could relax the emission levels or move the dates for compliance to another year. The industry also has an opportunity under the regulations to petition CARB to move dates. There's at least some flexibility in the regulations, which is the best we could do at this point.

"The decade of the '90s have been labeled the decade of the environment, and California's action certainly reflects that," says Liskey. □

Granular Applicators with Fiberglas Hoppers



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Correction

Implement & Tractor inadvertently transposed two columns in its "Farm Wheel Tractor Retail Sales By State" table in the Nov-Dec issue. The columns transposed were for 1989, 2-wheel drive and 4-wheel drive units. □

Case Introduces Compact Tractor Line

ASE International is introducing its new 1100 Series line, 3—compact tractors ideal for a variety of jobs on farms, estates, parks and golf courses.

"The 1100 Series tractors offer rugged dependability combined with state-of-the-art components and systems that customers have told us they want," says Bruce Rabe, brand manager for Case International compact tractors. The series includes the 19-hp 1120, 23-hp 1130 and 27-hp 1140.

Standard equipment on all three models includes hydrostatic power steering, a tilt steering wheel and foldable roll-over protective structure. The three-cylinder diesel engines are fully enclosed with mufflers located under the hood and underslung exhausts for better visibility.

A tilt-up hood, removable engine side panels and pull-out radiator screen allow easy servicing. A glow-plug starting aid speeds start-ups on cold mornings. "Engines on the 1130 and 1140 feature direct fuel injection," Rabe says.

Every 1100 Series model is equipped with rear and mid-tractor power take-off (PTO) shafts. The rear PTO rotates at 540 rpm and the mid PTO at 2,000 rpm.

"Live" PTO on the 1130 and 1140 operates independently of the transmission. On the 1120, the PTO shafts are transmission-driven with "live" PTO as an option.

The new L106 and L108 front-end loader models also are available.

A choice of hydrostatic or gear transmissions is available for all 1100 Series models. The gear transmission is partially synchronized on the 1120 with a first-gear/reverse shuttle for close work. On the 1130 and 1140, gear transmissions are fully synchronized. A speed set lever is available as part of the hydrostatic transmission option.

J I Case also is offering backhoes, rotary tillers and box scrapers designed to work with Case International compact tractors.

"Case has designed the new M160 mid-mounted, shaft-driven mowers to provide more than 5 inches of ground clearance with the 1100 Series tractors," Rabe says. Rear-mounted mowers are also available. A choice of mower sizes and arrangements are offered because what fits some conditions may not be right for others.

The new L106 and L108 front-end loader models also have been designed especially for the 1100 Series tractors.

The new attachments expand the Case International line of implements for compact tractors.

H180 and H185 backhoes feature strong steel subframes. The arm on both models rotates 180 degrees for work in confined areas. "For responsiveness, a two-lever control valve with access controls is mounted directly on the hydraulic valve. A dedicated valve allows simultaneous functioning of two backhoe modes," Rabe says.

Case International rotary tillers feature skid shoes, an adjustable rear shield and speed blades. All tillers offer a slip-clutch driveshaft as standard equipment.

Maximum tilling depth is 5.5 inches for all the tillers. For different applications, the tillers feature different numbers of blades. The T140 has 24 blades, the T152 has 32 blades and the T160 has 38 blades, based on the width of the models.

Case International box scrapers feature hardened steel edges that are both reversible and replaceable. The 48-inch S148 is fitted with four shanks, the 60-inch S160 with five, and the 72-inch S172 with six. □

CASE

(From pg. 9)

straight up and a conveyor chain unloads the cotton. Because the basket does have to be tilted, operators can position the picker more easily along a module builder or trailer. The weight of the basket is still centered on the picker itself during unloading, and operators have complete command of the unloading because the conveyor chain can be started or stopped at any time.

Both pickers have maximum picker speeds of 3.5 mph to enable harvesting time close to 10 percent faster than previous pickers.

The 4-row 2044 is powered by a 225-hp Case International diesel engine, while the 2022 is equipped with a 160-hp engine. The Cotton Express will be available at dealers by March 1991, although Kosten said many orders for the equipment are already being filled. □